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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,404

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Jorge Luiz Benine Pentead

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EXAMINER

WALDBAUM, SAMUEL A

ART UNIT

PAPER NUMBER

1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,404	Applicant(s) PENTEADO ET AL.	
	Examiner SAMUEL A. WALDBAUM	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/12/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-5, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fumihiko Imamura (GB 2,325,245, hereafter '245) in view of Moon (U.S. 5,671,493, hereafter '493).

3. Claims 1, 3-6 and 8-10: '245 teaches a basket/drum for holding laundry (page 2), a rotation sensor (pages 2, 8 & 9) a water level sensor and electric water feed valve (page 9, since the feed valve responds to electric signals it is an electrovalve) with a controller to calculate the moment of inertia and weight of the laundry (pages 2 & 3) which uses different rotational speeds in the drum (pages 9-13). '245 does not teach a tub for the basket or a voltage sensor. '493 is a washing machine. '493 teaches a tub (fig. 1 shows a tub that surrounds the basket) and a voltage sensor (col. 5, lines 3-20, col. 5. lines 50-67 and col. 6 lines 1-10) where the voltage information

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is used to calculate the inertia of the drum to determine the weight of the laundry (col. 1, lines 5-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have uses a voltage meter as taught by `493 in apparatus `245 to determine the voltage of the motor that contributes to the inertia of the motor to determine the weight of the laundry.

In regard to the specific operation of the controller/microprocessor, the same is of little patentable weight in claims for an apparatus and in view of the many possible control scenarios of the controller/microprocessor system in the patent to `245 in view of `493. See MPEP 2114"

APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART

>While features of an apparatus may be recited either structurally or functionally, claims<directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. >In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429,1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971);< In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

MANNER OF OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM FROM THE PRIOR ART

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) (The preamble of claim 1 recited that the apparatus was "for mixing flowing developer material" and the body of the claim recited "means for mixing ..., said mixing means being stationary and completely submerged in the developer material". The claim was rejected over a reference which taught all the structural limitations of the claim for the intended use of mixing flowing developer. However, the mixer was only partially submerged in the developer material. The Board held that the amount of submersion is immaterial to the structure of the mixer and thus the claim was properly rejected

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fumihiro Imamura (GB 2,325,245) in view of Moon (U.S. 5,671,493) as applied to claim 5 above, further in view of Knoop et al (U.S. 4,503,575, hereafter `575).

`245 and `493 teach all the limitations of claim 5.

4. Claim 7: `245 teaches a level sensor (page 9), but not what type of level sensor. `575 is a washing machine. `575 teaches that the level sensor can be a pressure switch (col. 2, line 30-50) to determine the level of the water (col. 2, line 30-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a pressure switch taught by `575 in apparatus `245 in view of `493 to determine the water level inside the washing machine.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fumihiko Imamura (GB 2,325,245) in view of Moon (U.S. 5,671,493) as applied to claim 1 above, further in view of Bruce et al (U.S. 6,4118,581, hereafter `581).

`245 and `493 teach all the limitations of claim 1.

5. Claims 2: `245 teaches a sensor to determine the rotation of the motor (pages 2, 8 and 9) but does not teach what type of sensor is used. `581 is a washing machine. `581 teaches the use of a tachometer (col. 2, lines 10-30) to determine the speed of the motor (col. 2, lines 10-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a tachometer as taught by `581 in apparatus `245 in view of `493 to determine the speed of the motor.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fumihiko Imamura (GB 2,325,245) in view of Moon (U.S. 5,671,493) and Badami et al (U.S. 5,577,283, hereafter `283).

6. Claims 11-14: See claim 1 above. `245 teaches detecting the rotation of the motor at two distinct speeds during an acceleration and deceleration period (pages 8-12), calculating the

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moment of inertia based of torque, time of acceleration and deceleration, rotational speed when calculating the inertia (pages 8-12). `245 further teaches that the determine value for the weight can be compared to a later determined value of the weight (pages 13-19) where both weight values are based of the moment of inertia, therefore they are taking difference of the inertia to determine the value (pages 13-19). `245 does not explicitly teach the detecting the voltage of the motor in the determination of the moment of inertia to determine the torque of the motor. `493 is a washing machine. `493 teaches detecting the voltage of the motor to determine the torque to be factored into the determination of the inertia of the drum (col. 5, line 1-col. 6, line 22). All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, meaning that the detecting the voltage as taught by `493 can be factored in the method of `245 to determine the inertia of the motor to detect the weight of the laundry.

`245 and `493 does not teach find the inertia of an unloaded basket. `283 is a washing machine. `283 teaches that the inertia takes into account the torque and takes into account the inertia of an unload basket (col. 5, lines 1-col. 7, line 5) where the unloaded inertia is determined the same way the inertia is determined for the loaded basket (col. 5 lines 40-55) allowing for a base value for the inertia of the drum to be set and a value to compare to is recorded in the controller (col. 5, lines 40-55). It would have been obvious to one of ordinary skill in the art at the time the invention is made to have use the compared inertia value as the unloaded value which is calculated the same was as the loaded inertia value as taught by `283 in the method of

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`245 in view of `493 to give a constant inertia value to compare the loaded value to the unload inertia value to determine the weight of just the laundry.

7. Claim 15: `245 teaches a water level sensor, a feed valve and a controller that controls these functions (page 9) where alarms are generated based off the data (page 9) where it is inherent that the feed valve is closed when the water level sensor generates a signal to the controller that the proper level of water is reached (page 12, where the water is feed to a specified level, therefore feed stops when the specified level is reached).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Imamura et al (U.S. 5,870,905) which is using a similar equation, especially the constant multiplier as the applicant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL A. WALDBAUM whose telephone number is (571)270-1860. The examiner can normally be reached on M-TR 6:20-3:50, F 6:30-10:30 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A. W./

Examiner, Art Unit 1792

/FRANKIE L. STINSON/

Primary Examiner, Art Unit 1792